

1641

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/462,931

DATE: 03/16/2001
 TIME: 15:08:18

Input Set : A:\PTO.txt
 Output Set: N:\CRF3\03162001\I462931.raw

**ENTERED
 RECEIVED**

MAR 23 2001

TECH CENTER 1600/2900

3 <110> APPLICANT: HELLMAN, Jukka
 4 KKTNEN, Sanna-Maria
 5 KARP, Matti
 6 LTVGREN, Timo
 7 VNNEN, Kalervo
 8 PETTERSSON, Kim
 10 <120> TITLE OF INVENTION: Isolated osteocalcin fragments
 12 <130> FILE REFERENCE: Isolated osteocalcin fragments
 14 <140> CURRENT APPLICATION NUMBER: US 09/462,931
 15 <141> CURRENT FILING DATE: 2000-01-18
 17 <150> PRIOR APPLICATION NUMBER: PCT/FI98/00550
 18 <151> PRIOR FILING DATE: 1998-06-24
 20 <150> PRIOR APPLICATION NUMBER: FI 973371
 21 <151> PRIOR FILING DATE: 1997-08-15
 23 <160> NUMBER OF SEQ ID NOS: 4
 25 <170> SOFTWARE: PatentIn Ver. 2.1
 27 <210> SEQ ID NO: 1
 28 <211> LENGTH: 160
 29 <212> TYPE: DNA
 30 <213> ORGANISM: Homo sapiens
 32 <220> FEATURE:
 33 <221> NAME/KEY: CDS
 34 <222> LOCATION: (1)..(147)
 36 <400> SEQUENCE: 1
 37 tac ctg tat caa tgg ctg gga gcc cca gtc ccc tac ccg gat ccc ctg 48
 38 Tyr Leu Tyr Gln Trp Leu Gly Ala Pro Val Pro Tyr Pro Asp Pro Leu
 39 1 5 10 15
 41 gag ccc agg agg gag gtg tgt gag ctc aat ccg gac tgt gac gag ttg 96
 42 Glu Pro Arg Arg Glu Val Cys Glu Leu Asn Pro Asp Cys Asp Glu Leu
 43 20 25 30
 45 gct gac cac atc ggc ttt cag gag gcc tat cgg cgc ttc tac ggc ccg 144
 46 Ala Asp His Ile Gly Phe Gln Glu Ala Tyr Arg Arg Phe Tyr Gly Pro
 47 35 40 45
 49 gtc taactgcaga tgc 160
 50 Val
 53 <210> SEQ ID NO: 2
 54 <211> LENGTH: 49
 55 <212> TYPE: PRT
 56 <213> ORGANISM: Homo sapiens
 58 <220> FEATURE:
 59 <221> NAME/KEY: peptide
 60 <222> LOCATION: (1)..(49)
 61 <223> OTHER INFORMATION: Glu at residues 17, 21 and 24 may be gamma-carboxy-Glu
 63 <400> SEQUENCE: 2
 64 Tyr Leu Tyr Gln Trp Leu Gly Ala Pro Val Pro Tyr Pro Asp Pro Leu
 65 1 5 10 15
 67 Glu Pro Arg Arg Glu Val Cys Glu Leu Asn Pro Asp Cys Asp Glu Leu

RAW SEQUENCE LISTING DATE: 03/16/2001
PATENT APPLICATION: US/09/462,931 TIME: 15:08:18

Input Set : A:\PTO.txt
Output Set: N:\CRF3\03162001\I462931.raw

```
68          20          25          30
70 Ala Asp His Ile Gly Phe Gln Glu Ala Tyr Arg Arg Phe Tyr Gly Pro
71          35          40          45
73 Val
76 <210> SEQ ID NO: 3
77 <211> LENGTH: 45
78 <212> TYPE: DNA
79 <213> ORGANISM: Homo sapiens
81 <220> FEATURE:
82 <221> NAME/KEY: CDS
83 <222> LOCATION: (1)..(33)
85 <400> SEQUENCE: 3
86 atc gaa ggt cgt ggg atc ccc ggg aat tca tcg tgactgactg ac          45
87 Ile Glu Gly Arg Gly Ile Pro Gly Asn Ser Ser
88 1          5          10
90 <210> SEQ ID NO: 4
91 <211> LENGTH: 11
92 <212> TYPE: PRT
93 <213> ORGANISM: Homo sapiens
95 <400> SEQUENCE: 4
96 Ile Glu Gly Arg Gly Ile Pro Gly Asn Ser Ser
97 1          5          10
```

VERIFICATION SUMMARY DATE: 03/16/2001
PATENT APPLICATION: US/09/462,931 TIME: 15:08:19

Input Set : A:\PTO.txt
Output Set: N:\CRF3\03162001\I462931.raw